

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN ADJUSTMENT OF RATES OF THE )  
KINGSTON-TERRILL WATER DISTRICT ) CASE NO. 92-215  
OF MADISON COUNTY, KENTUCKY )

O R D E R

On June 17, 1992, Kingston-Terrill Water District ("Kingston-Terrill") filed its application for Commission approval of a proposed increase in its rates for water service. Commission Staff, having performed a limited financial review of Kingston-Terrill's operations, has prepared the attached Staff Report containing Staff's findings and recommendations regarding Kingston-Terrill's proposed rates. All parties should review the report carefully and provide any written comments or requests for a hearing or informal conference no later than 15 days from the date of this Order.

IT IS THEREFORE ORDERED that all parties shall have 15 days from the date of this Order to provide written comments regarding the attached Staff Report or requests for a hearing or informal conference. If no request for a hearing or informal conference is received, then this case will be submitted to the Commission for a decision.

Done at Frankfort, Kentucky, this 6th day of November, 1992.

PUBLIC SERVICE COMMISSION  
  
For the Commission

ATTEST:

  
Executive Director

RECEIVED

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PUBLIC SERVICE  
COMMISSION

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KINGSTON-TERRILL WATER DISTRICT ) CASE NO. 92-215  
OF MADISON COUNTY, KENTUCKY )

STAFF REPORT

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Public Utility Financial  
Analyst, Chief  
Water and Sewer Revenue  
Requirements Branch  
Rates and Tariffs Division

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Public Utility Rate Analyst  
Communications, Water and  
Sewer Rate Design Branch  
Research Division

STAFF REPORT  
ON  
KINGSTON-TERRILL WATER DISTRICT  
CASE NO. 92-215

A. Preface

On May 21, 1992, the Kingston-Terrill Water District ("Kingston-Terrill") submitted its application with the Commission seeking approval of its proposed rate increase pursuant to KRS 278.180. However, the application was not considered filed until June 17, 1992. Kingston-Terrill's proposed rates would produce an increase in its annual revenues of \$64,617, an increase of 10.53 percent over test-period normalized revenues from rates of \$613,434.

In order to evaluate the requested increase, the Commission Staff ("Staff") chose to perform a limited financial review of Kingston-Terrill's operations for the test-period, the calendar year ending December 31, 1991. Mark C. Frost of the Commission's Division of Rates and Tariffs performed the limited review on July 9 and 28, 1992 and August 11, 1992.

Mr. Frost is responsible for the preparation of this Staff Report except for Section B, Operating Revenues; Section D, Rate Design; and Appendix A, which were prepared by Nicky Moore of the Commission's Research Division. Based on the findings contained in this report, Staff recommends that Kingston-Terrill be allowed to increase its annual revenues from rates by \$11,280.

Scope

The scope of the review was limited to obtaining information as to whether the test-period operating revenue and expenses were representative of normal operations. Insignificant or immaterial discrepancies were not pursued and are not addressed herein.

B. Analysis of Operating Revenues and Expenses

Operating Revenues

Kingston-Terrill, in its application, reported test-year operating income of \$481,534. Of this amount, \$462,024 was from the sale of water, \$12,821 from late charges and \$6,689 was miscellaneous revenue. The billing analysis filed for the same period produced revenue in the amount of \$563,409, a difference of \$101,385 over the reported revenue from water sales. The billing analysis submitted by Kingston-Terrill was made by a joint effort between the Applicant and the Commission Staff; therefore, for the purpose of this Staff Report, the Staff has used the revenue derived from the billing analysis.

On July 23, 1992, in Case No. 92-271, Kingston-Terrill was granted a purchased water adjustment in the amount of 23.87 cents per 100 cu. ft. of water sold. An adjustment of \$50,025 in revenue for the purchased water adjustment has been included in the determination of normalized operating revenues. The total normalized revenue from water sales is \$613,434. No adjustments have been made to the revenue from miscellaneous or late charges,

therefore, the total adjusted operating revenue for the test period is \$632,944.

Operating Expenses

Kingston-Terrill reported operating expenses of \$528,164 for the test-period. The following are Staff's recommended adjustments to Kingston-Terrill's actual test-period operations:

Purchased Water: Kingston-Terrill's test-period purchased water expense was \$295,877. Effective January 1, 1992, Kingston-Terrill's supplier, the City of Richmond, ("Richmond") increased its wholesale water rate from \$1.30 to \$1.50 per 100 cubic feet. On June 30, 1992, Kingston-Terrill filed Case No. 92-271,<sup>1</sup> to request a purchased water adjustment, a pass through of Richmond's increased water rate to Kingston-Terrill's customers.

Since an adjustment based on Richmond's increased water rate would meet the rate-making criteria of known and measurable, Staff recommends that purchased water expense reflect this increased cost. To be consistent, Kingston-Terrill's normalized operating revenue recommended herein has been adjusted to reflect the rates granted in Case No. 92-271.

During the test-period Kingston-Terrill incurred a line loss of approximately 19.39 percent, which exceeds the allowable limit of 15 percent established by this Commission. A review of Kingston-Terrill's 3 previous annual reports reveals that historically,

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<sup>1</sup> Case No. 92-271, Purchased Water Adjustment of Kingston-Terrill Water District, Order issued July 23, 1992.

Kingston-Terrill's line loss has exceeded the Commission's 15 percent allowable limit. Staff recommends that Kingston-Terrill's line loss be limited to the Commission's allowable 15 percent limit.

Based on Richmond's wholesale water rate of \$1.50 per 100 cubic feet and Kingston-Terrill's test-period water sales of 20,513,097 cubic feet, adjusted to reflect the allowable 15 percent line loss, Staff has calculated a pro forma purchased water expense of \$361,996.<sup>2</sup> Accordingly, purchased water expense has been increased by \$66,119.

Computer: Kingston-Terrill's test-period computer expense of \$5,571 represents its computer lease payments that were paid to Gary Owens, Kingston-Terrill's manager. In December 1991, Kingston-Terrill purchased the computer from Mr. Owens at a cost of \$6,000. Since Kingston-Terrill is no longer leasing its computer, the cost of the lease should be eliminated from test-period operations.

On January 1, 1992, Kingston-Terrill entered into a computer maintenance contract with Computer Resources Corporation ("Computer Resources"), whereby Computer Resources agreed to maintain Kingston-Terrill's computer at a quarterly fee of \$200, or \$800 annually. To document its cost, Kingston-Terrill provided Staff with a copy of the computer maintenance contract.

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<sup>2</sup>      20,513,097 Cubic Feet + 85% =                      24,133,055 Cubic Feet  
         Wholesale Water Rate - Per Gallon      X        .015  
         Pro Forma Purchased Water                      \$ 361,996

Based on its review of the computer maintenance contract, Staff is of the opinion that the annual cost of \$800 is reasonable and that it should be reflected in Kingston-Terrill's test-period operations. Accordingly, computer expense has been decreased by \$4,771 to reflect the discontinuance of the computer lease and addition of the cost of the new computer maintenance contract.

Insurance and Bonding: Kingston-Terrill's test-period insurance expense was \$16,427. Upon review of Kingston-Terrill's 1991 and 1992 insurance invoices, Staff noted that the insurance premiums had increased. An adjustment based on the increased premiums would meet the rate-making criteria that adjustments be known and measurable and therefore, Staff recommends that the increased cost be reflected in test-period operations.

In the test-period Kingston-Terrill provided family health insurance coverage to its manager and single health insurance coverage to the remainder of its employees. The Commission determined in Kingston-Terrill's previous rate case,<sup>3</sup> that only the cost of providing single health insurance coverage for Kingston-Terrill's employees should be allowed for rate-making purposes.

Based on the 1992 insurance premiums and the cost of providing single health insurance coverage to all of Kingston-Terrill's employees, Staff has calculated a pro forma insurance expense of

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<sup>3</sup> Case No. 9542, An Adjustment of Rates of the Kingston-Terrill Water District of Madison County, Kentucky, Order issued October 6, 1986.

\$21,010, as shown in Appendix C. Accordingly, test-period insurance expense has been increased by \$4,583.

Miscellaneous: Kingston-Terrill reported test-period miscellaneous expense of \$2,674 which represents water testing, bank charges, tester fees, meeting/seminar reimbursements, and uniforms. A detailed analysis of the test-period invoices and general ledger revealed that the actual test-period miscellaneous expense was \$4,099,<sup>4</sup> a difference of \$1,425 from the amount Kingston-Terrill reported. Accordingly, miscellaneous expense has been increased by \$1,425.

Operating and Office Salaries: Kingston-Terrill reported test-period operating and office salaries expense of \$61,054. During the test period, Kingston-Terrill employed a manager, one full-time and various part-time maintenance employees, and two office employees.

Kingston-Terrill's method of calculating its employees' salaries is very cumbersome and difficult to understand. Staff spent the majority of its 3 day field review analyzing Kingston-Terrill's payroll ledger and general ledger in an attempt to understand how the salaries were calculated and allocated to the various expense accounts. Based on its analysis, Staff determined

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<sup>4</sup> Water Tests	\$ 730
Bank Charges	12
Tester Fees	1,000
Meeting/Seminar Reimbursements	1,284
Uniforms	+ 1,073
Test-Period Miscellaneous Expense	<u>\$ 4,099</u>



that Kingston-Terrill's test-period operating and office salaries were \$77,188 as shown in Appendix D.

At the request of Staff, Kingston-Terrill provided job description schedules which listed the duties performed by each employee. Upon review of these schedules, Staff is of the opinion that Kingston-Terrill's 1991 salary levels are reasonable and therefore, recommends that operating and office salaries be increased by \$16,134.

As previously mentioned, Kingston-Terrill's method of calculating its employees' salaries is cumbersome and difficult to understand. An example is the manager's salary which is based on the number of meters times \$2.65 less the salaries of the office employees and the meter readers. For this reason, Staff strongly recommends that Kingston-Terrill adopt a less cumbersome method that would be easier to understand and apply.

Office Rent: Kingston-Terrill reported office rent expense of \$3,300 for the test period. Kingston-Terrill informed Staff that on August 1, 1992 its office rent was increased from \$275 to \$300 per month. Staff is of the opinion that an adjustment based on the increased office rent would meet the rate-making criteria that adjustments be known and measurable and therefore should be reflected in test period operations.

Based on the increased monthly office rent of \$300, Staff has calculated a pro forma level of \$3,600. Accordingly, office rent expense has been increased by \$300.

Equipment Rent: Upon review of the test-period work orders, Staff noted that Kingston-Terrill had rented a backhoe and ditchwitch from 2 of its employees at a cost of \$1,650. Staff is of the opinion that the rental cost is reasonable and should be reflected in Kingston-Terrill's test-period operations. Therefore, operating expenses have been increased by \$1,650 to reflect the cost of the equipment rental.

Repairs and Maintenance: Kingston-Terrill's test-period repairs and maintenance expense was \$49,766. Staff noted that Kingston-Terrill had misclassified to this account \$16,531 of payments to its manager and maintenance employee for maintenance services that should have been reported in either equipment rental expense or salaries and wages expense.

The incorrect classification of these payments would not affect the overall determination of Kingston-Terrill's revenue requirement. However, these payments are included in the calculation of Kingston-Terrill's pro forma equipment rental, and salaries and wages expenses. Accordingly, repairs and maintenance expense has been decreased by \$16,531.

Transportation: Kingston-Terrill reported test-period transportation expense of \$6,988. A detailed analysis of the general ledger and test-period invoices revealed that the actual test-period transportation expense was \$5,023,<sup>5</sup> a difference of

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<sup>5</sup> Gas Reimbursement	\$350 x 12-Months =	\$ 4,200
Tax & License		119
Truck Repairs		<u>+ 704</u>

\$1,965 from the amount Kingston-Terrill reported. Accordingly, transportation expense has been decreased by \$1,965.

Utilities and Telephone: Kingston-Terrill reported utility and telephone expense of \$7,902 for the test period. Upon review of the invoices, Staff determined that the actual test-period utility and telephone expense was \$7,489,<sup>6</sup> a difference of \$413 from the amount Kingston-Terrill reported. Accordingly, utility and telephone expense has been decreased by \$413.

Depreciation: Kingston-Terrill reported test-period depreciation expense of \$45,533. During the test period, Kingston-Terrill incurred several capital expenditures which it correctly depreciated. However, since the expenditures did not occur at the beginning of the year, Kingston-Terrill failed to report a full year of depreciation expense. Staff has determined that depreciation expense should be increased by \$2,989 to reflect the annualization of this expense and has increased depreciation expense by this amount.

Amortization: At the time of the field review, Kingston-Terrill's cost to file this rate case was \$3,050. Staff is of the opinion that Kingston-Terrill's rate case cost is reasonable.

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Transportation Expense	<u>\$ 5,023</u>
<sup>6</sup> Electric:	
Tower - Pumping	\$ 5,079
Tower - Lighting	94
Office	866
Telephone	1,318
Garbage	+ 132
Utility and Telephone Expense	<u>\$ 7,489</u>

Since utilities normally do not request a rate increase every year, the Commission's past practice has been to amortize rate case cost over a 3-year period. Staff has calculated amortization expense of \$1,016 based on amortizing this cost over a 3-year period, and recommends that \$1,016 of amortization expense be included in test-period operations.

As previously mentioned, Kingston-Terrill filed a PWA case in 1992. Staff determined the cost of this case to be \$200. A PWA case is similar to a rate case in that a utility does not normally seek a PWA every year. Therefore, Staff is of the opinion that the PWA case should be amortized in a similar fashion, has calculated amortization expense of \$67, and recommends that this amount also be included in test-period operations.

FICA: Kingston-Terrill reported test-period FICA expense of \$6,502. Based on the pro forma salaries and wages expense determined reasonable herein, Kingston-Terrill's FICA expense would be \$5,905, a difference of \$597 from the amount Kingston-Terrill reported. Accordingly, FICA expense has been decreased by \$597.

#### Operations Summary

Based on the recommendations of Staff contained in this report, Kingston-Terrill's operating statement would appear as set forth in Appendix B to this report.

#### C. Revenue Requirements Determination

The approach frequently used by this Commission to determine revenue requirements for "non-profit" water utilities is debt

service coverage("DSC"). Staff recommends the use of this approach in determining Kingston-Terrill's revenue requirement.

Staff has determined that Kingston-Terrill's annual debt service is \$40,423.<sup>7</sup> Kingston-Terrill's adjusted operations reflect \$44,038<sup>8</sup> in income available for debt service which results in a DSC of 1.09x<sup>9</sup>. The increase in rates requested by Kingston-Terrill would result in income available for debt service of \$108,655<sup>10</sup> and a DSC of 2.69x.<sup>11</sup>

Staff is of the opinion that a 1.2x DSC will provide sufficient revenues to allow Kingston-Terrill to meet its operating expenses, and service its debt. A DSC of 1.2x will result in a

7	A Bonds		B Bonds		Total
	Interest	Principal	Interest	Principal	
	\$ 9,550	\$ 3,000	\$ 13,650	\$ 15,000	\$ 41,200
	9,400	3,000	12,919	15,000	40,319
	+ 9,250	+ 3,000	+ 12,500	+ 15,000	+ 39,750
	<u>\$ 28,200</u>	<u>\$ 9,000</u>	<u>\$ 39,069</u>	<u>\$ 45,000</u>	<u>\$ 121,269</u>
					+ 3-Years
					<u>\$ 40,423</u>

8	Net Operating Income	\$ 34,744
	Other income	+ 9,264
	Income Available for DSC	<u>\$ 44,038</u>

9      \$44,038 + \$40,423 = 1.09x.

10	Income Available for DSC	\$ 44,038
	Requested Increase in Rates	+ 64,617
		<u>\$ 108,655</u>

11      \$108,655 + \$40,423 = 2.69x.

revenue requirement of \$653,488<sup>12</sup> and therefore, Staff recommends that Kingston-Terrill be granted an increase in annual revenues from rates of \$11,280.<sup>13</sup>

D. Rate Design

In its Application, Kingston-Terrill filed a schedule of present and proposed rates and did not propose any change in the rate structure. The Staff is in agreement that the proposed rate structure should not be altered. Therefore, any increase recommended in this case has been added to the existing rate structure. The Staff recommends that the rates in Appendix A, attached hereto and incorporated herein, be approved for services rendered.

<sup>12</sup>	Debt Service	\$ 40,423
	Recommended DSC	x 1.2
	Subtotal	\$ 48,508
	Adjusted Operating Expenses	598,170
	Interest Expense - Other	+ 6,810
	Revenue Requirement	<u>\$ 653,488</u>
<sup>13</sup>	Revenue Requirement	\$ 653,488
	Normalized Operating Revenue	632,944
	Other Income	- 9,264
	Recommended Increase	<u>\$ 11,280</u>

Staff Report  
PSC Case No. 92-215  
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E. Signatures

Mark C. Frost  
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Requirements Branch  
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Sewer Rate Design Branch  
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APPENDIX A

TO STAFF REPORT CASE NO. 92-215

The Staff recommends the following rate be prescribed for customers of Kingston-Terrill Water District.

Usage Blocks

First 200 Cubic Feet  
Next 300 Cubic Feet  
Next 300 Cubic Feet  
Over 800 Cubic Feet

Monthly Rates

\$9.25 Minimum Bill  
4.10 Per 100 Feet  
3.10 Per 100 Feet  
2.10 Per 100 Feet



APPENDIX B  
TO STAFF REPORT CASE NO. 92-215

	Actual Test-Period Operations	Recommended Adjustments	Adjusted Operations
Operating Revenues:	-----	-----	-----
Sale of Water	\$ 462,024	\$ 151,410	\$ 613,434
Miscellaneous	6,689	0	6,689
Late Charges	12,821	0	12,821
	-----	-----	-----
Total Operating Revenues	\$ 481,534	\$ 151,410	\$ 632,944
	-----	-----	-----
Operating Expenses:			
Purchased Water	\$ 295,877	\$ 66,119	\$ 361,996
Bad Debt Expense	2,493	0	2,493
Commissioners' Fees	10,800	0	10,800
Computer Charges	5,571	(4,771)	800
Insurance & Bonding	16,427	4,583	21,010
Miscellaneous	2,674	1,425	4,099
Office Supplies	2,237	0	2,237
Salaries & Wages	61,054	16,134	77,188
Postage	4,282	0	4,282
Professional Services	4,140	0	4,140
Radio & Beeper Rental	1,394	0	1,394
Rent - Office	3,300	300	3,600
Rent - Equipment	0	1,650	1,650
Repairs & Maintenance	49,766	(16,531)	33,235
Transportation	6,988	(1,965)	5,023
Utilities & Telephone	7,902	(413)	7,489
Depreciation	45,533	2,989	48,522
Amortization	1,224	1,083	2,307
Payroll Taxes	6,502	(597)	5,905
	-----	-----	-----
Total Operating Expenses	\$ 528,164	\$ 70,006	\$ 598,170
	-----	-----	-----
Net Operating Income/(Loss)	\$ (46,630)	\$ 81,404	\$ 34,774
	-----	-----	-----
Other Income:			
Interest - Time Deposits	\$ 8,506	\$ 0	\$ 8,506
Interest - Other	758	0	758
	-----	-----	-----
Total Other Income	\$ 9,264	\$ 0	\$ 9,264
	-----	-----	-----
Other Deductions:			
Long-Term Interest	\$ 24,634	\$ 0	\$ 24,634
Interest - Other	6,810	0	6,810
	-----	-----	-----
Total Other Deductions	\$ 31,444	\$ 0	\$ 31,444
	-----	-----	-----
Net Income/(Loss)	\$ (68,810)	\$ 81,404	\$ 12,594
	=====	=====	=====

APPENDIX C  
TO STAFF REPORT CASE NO. 92-215

Health and Dental Insurance:

Blue Cross/Blue Shield - Single Premium	\$ 105
Delta Dental - Single Premium	+ 210
Monthly Employee Dental & Health Premiums	\$ 315
Times: Number of Employees	x 4
Monthly Dental & Health Premiums	\$ 1,260
Times: 12-Months	x 12
Annual Employee Health & Dental Insurance	\$ 15,120
General Liability	1,641
Business Auto	832
Commercial Property	441
Commercial Inland Marine	240
Workers Compensation	2,250
Public Official Bond	102
Blanket Fidelity Bond	282
Encroachment Bond	+ 102
Pro Forma Insurance Expense	<u>\$ 21,010</u>

APPENDIX D  
TO STAFF REPORT CASE NO. 92-215

Gary Owens:		
Management Salary	Monthly - Varies	\$ 28,369
Maintenance	Source - Workorders	12,568
Pump Maintenance	\$60.00 x 12-Months =	720
Kathy Rice:		
Office	\$ 4.40 x 1,986.5 Hrs =	8,741
Angela White:		
Office	\$ 4.25 x 1,695.5 Hrs =	7,206
Eddie Hunter:		
Meter Reading	\$ 0.35 x 19,696 Meters =	6,894
Maintenance	Source - Workorders	+ 12,690
Test-Period Salaries & Wages Expense		<u>\$ 77,188</u>